REMARKS

The Office Action mailed on September 14, 2010, has been received and its contents carefully considered. Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the following remarks. Upon entry of the present Reply, Claims 68, 69, 71 and 73-77 are pending in the present application. Claims 68, 69, 71 and 73-77 stand rejected. Applicant submits that upon entry of the present Reply, Claims 68, 69, 71 and 73-77 are in condition for allowance. Moreover, Applicant submits that no new matter has been introduced by the foregoing amendments.

Rejections under 35 U.S.C. §103

Claims 68, 69, 71, and 73-77 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U. S. Patent No. 4,642,775 to Cline et al. (hereinafter referred to as "Cline").

Applicant respectfully traverses these rejections for at least the following reasons.

Independent Claim 68 is the sole independent claim presently under consideration. Cline, alone or in combination, does not teach or suggest every element recited in independent Claim 68, as amended.

The rejection of Claims 68, 69, 71 and 73-77 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Cline is respectfully traversed.

Claim 68 recites:

A method of providing to and for use by an aircraft aviation professional a lightweight and easily manipulated electronic flight bag, said method comprising the steps of: (a) providing a transportable laptop computer to be carried by the aviation professional for use within at least one of an aircraft and an airport, in a carry bag; (b) programming the transportable laptop computer with linear and non-linear algorithms and operating programs to at least: process flight information, manipulate flight related data in a non-linear algorithm thereby aiding in flight decision-making processes resulting in solutions to flight related mathematical computations and runway selections and aircraft operating parameters and procedures, calculate pilot fatigue limits and scheduling issues and fuel computations, and provide data displays to the aviation professional; (c) receiving information for a first flight plan from a flight operations, wherein the information for the first flight plan includes a departure runway information, destination information, alternate airports information, and fuel time information; (d) inputting aircraft and flight related data into the transportable laptop computer using an input device, wherein the aircraft and flight related data includes weather information for the first flight plan, aircraft crew scheduling information, aircraft maintenance information, aircraft load weight and balance information, and aircraft manifest information; (e) acquiring information that includes the weather information, the aircraft crew scheduling information, the aircraft maintenance information, the aircraft load weight and balance information and the aircraft manifest information on an up to the minute basis using the transportable laptop computer; (f) calculating using the transportable laptop computer while en route an adjusted second flight plan based on the up to the minute information, wherein the adjusted second flight plan is substantially different than the first flight plan; and (g) outputting the adjusted second flight plan while en route to the aviation professional using at least one of an interactive headgear worn by the aviation professional, a translucent display coupled to the transportable laptop computer and an aircraft system.

Cline does not describe or suggest every element recited in <u>Claim 68</u>. Rather, in contrast to the present invention, Cline describes a flight planning system that utilizes a portable computer (40) that includes a modem (51) that may be connected in communication to **a ground-based flight data center (30)**. The computer (40) also includes input devices, such as a keyboard (44), and output devices such as an LCD (42) and a disk drive (52). The ground-based data center (30) generates a flight plan, which is transmitted over a telephone line (48) to the computer (40) and loaded onto a disk (54) by a pilot of an aircraft (10). **The disk (54) may then be physically carried by the pilot** to the aircraft (10) and inserted into the on-board data management unit (20), which then makes the flight plan available to a flight management computer (14). As a result, the flight plan does not need to be manually entered into an onboard navigation system.

The pilot may enter, or input, information related to a **flight plan** into the computer (40). As stated in Col. 6, lines 59-68 and Col. 7, lines 1-10, such information includes:

> (1) aircraft registration number; (2) type of aircraft; (3) basic operating weight; (4) taxi fuel weight; (5) reserve fuel weight; (6) preferred mach/TAS; (7) direct operating cost; (8) fuel price per gallon; (9) maximum allowable fuel; (10) departure airport; (11) departure time; (12) destination airport; (13) route preference; (14) payload weight; (15) fuel on board; (16) performance bias; (17) weather requests; and (18) message entry.

Next, the pilot connects the computer (40) to the ground-based data center (30) using the **telephone lines** (48) and the modem (51). Notably, the flight plan described in Cline **is computed at the ground-based data center (30)**. Most notably, once the pilot receives, reviews and selects one of the flight plans computed by the ground-based data

center (30), **the flight plan** is transferred onto the disk (54), the computer (40) **is**

shutdown by the pilot and packed away, and then the pilot boards the aircraft (10).

Once on board the aircraft (10), the pilot uploads **the flight plan** from the disk (54) to the

on-board data management unit (20) using an on board data transfer unit (18). **As a**

result, the computer (40) is <u>not</u> used on the aircraft (10) <u>en route</u>. As stated in Col. 8,

lines 14 – 20:

> Once the pilot has finished reviewing the flight plan data and weather that
> is displayed on the display unit (42), the disk (54) is ejected from the disk
> drive (52) and transferred to the data transfer unit (18) in the cockpit by
> the pilot. **The portable computer (40) can then be stored in any**
> **convenient location such as the aircraft baggage compartment.**

Notably, Cline is silent regarding "acquiring information that includes the weather

information, the aircraft crew scheduling information, the aircraft maintenance

information, the aircraft load weight and balance information and the aircraft manifest

information on an up to the minute basis using the transportable laptop computer," as

recited in <u>Claim 68</u>.

Cline repeatedly makes reference only to <u>a flight plan</u>. Only flight plan data and

weather requests can be loaded into the Cline flight plan system. "<u>Flight plan</u>," is a

specific term related only to certain elements of a flight. The elements recited by Cline

starting at Col. 6, line 59 are consistent with <u>a flight plan</u>. However, there is much more

involved in a flight than a simple static flight plan. Cline makes no mention of the

additional claimed elements dynamically processed by the present invention.

In fact, the system of Cline is only designed to handle information related to a

flight plan. If a proposed modification would render the prior art invention being

modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). As understood by a person of ordinary skill in the art, the inclusion of any parameters in addition to the flight plan (i.e. "flight related data" as claimed in the present invention) would render the system of Cline inoperable. The specific elements recited by Cline are included out of necessity for Cline to function correctly. Any further information cannot be processed by Cline, especially on a continuous basis.

These discrepancies continue to reinforce the fact that the computer in Cline is never utilized in flight and thus Cline does not update or manipulate information while a flight is in progress. As noted previously, the "portable computer" in Cline is not used as an in-flight component of any flight system, but rather strictly on the ground. Further, as stated in Cline Col 8, lines 1-13:

> "Once the computer **has been disconnected** from the data center, the pilot **can review** on the display various factors relating to the generated flight plan. The data available **for review** includes: the pilot inputs, route description, flight levels, aircraft weights, fuel parameters. A leg by leg display of the flight plan is also provided that includes for each leg: flight level, distance, estimated time enroute (ETE), magnetic course, predicted fuel burn, predicted fuel flow, predicted ground speed, predicted true airspeed (TAS), forecast wind, forecast outside air temperature, predicted remaining fuel, predicted remaining flight distance and predicted remaining flight time." (emphasis added).

Therefore, the text items displayed can only be **reviewed** by the pilot, **not manipulated, integrated, or revised**. Further, the review function in Cline is only done after the computer is **disconnected** from the data center.

The Examiner tacitly admits as such in the most recent Office Action stating "it would have been obvious at the time the invention was made to use the portable computer as taught by Cline while en route for performing another flight plan related tasks (sic)." Applicant respectfully submits that this statement does not satisfy the Examiner's burden of establishing a *prima facie* case of obviousness.

The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval).

In the most recent Office Action, the Examiner does not articulate any reason to support his conclusion of obviousness. Rather, the Examiner makes a simple conclusory statement that "it would have been obvious at the time of invention" without any rational underpinning. No evidence is supplied as to why, over 11 years ago when the present

application was filed, this limitation would be obvious. The Examiner does not point to any objective teaching of Cline or any other reference in reliance on his position.

As a result, Applicant respectfully submits that the Examiner has not met his initial burden of factually supporting any *prima facie* conclusion of obviousness. Accordingly, Applicant respectfully requests that the §103(a) rejections be withdrawn.

For at least the reasons set forth above, Applicant respectfully submits that independent Claim 68 is patentable over Cline. Since dependent Claims 69, 71 and 73-77 depend directly from independent Claim 68, Applicant respectfully submits that Claims 69, 71 and 73-77 likewise are patentable over Cline.

CONCLUSION

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds of rejection are believed to have been overcome. The application, as amended, is believed to be in condition of allowance. An early and favorable action to that effect is respectfully requested.

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Respectfully submitted,
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